

WHAT IS CLAIMED IS:

1. A sterile, single-use needle assembly for administering a unit dose of a vaccine comprising:
 - a hub including a first end and a second end;
 - a unit dose needle having a patient end configured to hold a unit dose of a vaccine extending from said first end of said hub and a non-patient end extending from said second end of said hub;
 - a first packaging shield removably encompassing said patient end of said unit dose needle; and
 - a second packaging shield removably encompassing said non-patient end of said unit dose needle,
 - wherein said first packaging shield and said second packaging shield form a sterile seal with the unit dose needle contained within said first packaging shield.
2. The needle assembly of claim 1, wherein the unit dose needle comprises a bifurcated needle, with the patient end including two pointed prongs which are capable of penetrating or abrading the skin of a patient, and wherein the prongs are separated by a U-shaped channel capable of holding the unit dose of a vaccine.
3. The needle assembly of claim 1, wherein the unit dose of a vaccine is a liquid.

4. The needle assembly of claim 1, wherein the hub is fixedly attached to the unit dose needle along a portion of the unit dose needle between the patient end and the handle end by an adhesive joint.

5. The needle of claim 4, wherein the adhesive joint comprises an epoxy adhesive.

6. The needle assembly of claim 1, wherein the first end of the hub includes male ribs for reversible engagement with said first packaging shield.

7. The needle assembly of claim 1, wherein the second end of the hub includes threads.

8. The needle assembly of claim 1, wherein the first and second packaging shields comprise one or more moldable plastics.

9. The needle assembly of claim 1, further comprising a packaging label extending over an outer surface between the first packaging shield and the second packaging shield.

10. A sterile needle assembly for administering a unit dose of a vaccine comprising:

a unit dose needle having an elongated body including a blunt handle end and a patient end configured to hold a unit dose of a vaccine;

a hub fixedly attached to the elongated body of the unit dose needle between the patient end and the blunt handle end;

a first packaging shield encompassing the patient end of the unit dose needle and removably attached to the hub; and

a second packaging shield encompassing the blunt handle end of the unit dose needle and removably attached to the hub,

wherein the attachment between the first packaging shield and the hub forms a sterile seal, with the unit dose needle contained within the first packaging shield.

11. The needle assembly of claim 10, wherein the unit dose needle comprises a bifurcated needle, with the patient end including two pointed prongs which are capable of penetrating or abrading the skin of a patient, and wherein the prongs are separated by a U-shaped channel capable of holding the unit dose of a vaccine.

12. The needle assembly of claim 10, wherein the hub includes male ribs for engagement with said first packaging shield.

13. The needle assembly of claim 10, wherein the hub includes threads.

14. The needle assembly of claim 10, further comprising a packaging label extending over an outer surface between the first packaging shield and the second packaging shield.

15. A sterile needle assembly for administering a unit dose of a vaccine comprising:

a unit dose needle having an elongated body including a non-patient end and a patient end configured to hold a unit dose of a vaccine;

a hub fixedly attached to the elongated body of the unit dose needle having a first end and a second end;

a first packaging shield encompassing the patient end of the unit dose needle and removably attached to said first end of said hub; and

a second packaging shield attached to the second end of the hub,
wherein the attachment between the first packaging shield and the hub forms a sterile seal, with the unit dose needle contained within the first packaging shield.

16. The needle assembly of claim 15, wherein the second packaging shield is attached to the second end of the hub.

17. The needle assembly of claim 15, wherein the non-patient end of the unit dose needle extends into the second packaging shield.

18. A sterile needle assembly for administering a unit dose of a vaccine comprising:
 - a unit dose needle having an elongated body including a blunt handle end and a patient end configured to hold a unit dose of a vaccine;
 - a hub fixedly attached to the elongated body of the unit dose needle between the patient end and the blunt handle end;
 - a first packaging shield encompassing the patient end of the unit dose needle; and
 - a second packaging shield encompassing the blunt handle end of the unit dose needle,
 - wherein the unit dose needle is contained within the first packaging shield in a sterile environment.
19. The needle assembly of claim 18, wherein the first packaging shield is removably mated with the hub.
20. The needle assembly of claim 19, wherein the hub includes ribs for engagement with the first packaging shield.
21. The needle assembly of claim 18, wherein the second packaging shield is removably mated with the first packaging shield.

22. The needle assembly of claim 21, further comprising a packaging label extending over an outer surface between the first packaging shield and the second packaging shield.

23. The needle assembly of claim 18, wherein the unit dose needle comprises a bifurcated needle, with the patient end including two pointed prongs which are capable of penetrating or abrading the skin of a patient, and wherein the prongs are separated by a U-shaped channel capable of holding the unit dose of a vaccine.

24. The needle assembly of claim 18, wherein the hub includes threads.

25. A sterile needle assembly for administering a unit dose of a vaccine comprising:

a unit dose needle having an elongated body including a non-patient end and a patient end configured to hold a unit dose of a vaccine;

a hub fixedly attached to the elongated body of the unit dose needle between the non-patient end and the patient end;

a first packaging shield encompassing the patient end of the unit dose needle and removably mated with said hub; and

a second packaging shield removably mated with the first packaging shield,

wherein the unit dose needle is maintained within the first packaging shield in a sterile environment.

26. The needle assembly of claim 25, wherein the non-patient end of the unit dose needle extends within the second packaging shield.

27. The needle assembly of claim 25, wherein the first packaging shield and the second packaging shield include interengaging structure for mating therebetween.

28. The needle assembly of claim 27, wherein said first packaging shield includes an annular skirt for mating within said second packaging shield.

29. The needle assembly of claim 28, wherein said second packaging shield includes internal ribs for engagement with said annular skirt of said first packaging shield.